REMARKS

Applicants gratefully acknowledge the Examiner's kind explanation of the relatively new method of signing off on a Form PTO 1449. Applicants also gratefully acknowledge the withdrawal of the previous anticipation rejection of Claims 11, 12, and 18 based on United States Published Application 2002/0040044 ("Schlatter"), the obviousness rejection of Claims 11, 13-15, 17, and 18 based on Schlatter, and the obviousness rejection of Claims 11 and 16 based on Schlatter in view of WO 02/081437 ("Kunz et al").

In view of the currently outstanding rejections, Applicants have amended Claim 11 to change the bridging term "comprising" to the more restrictive term "consisting essentially of" (which excludes additional materials that would materially affect the basic and novel characteristics of the claimed compositions) and to incorporate the limitations of Claim 18 and Claim 24 (i.e., to specify three two-component dispersant mixtures). Applicant have accordingly canceled Claims 18, 23, and 24. All claims remain fully supported in the specification.

Rejections under 35 U.S.C. 103

A. Schlatter in view of Baur

Claims 11-15, 17, 18, and 21-24 stand rejected under 35 U.S.C. 103(a) as being unpatentable over United States Published Application 2002/0040044 ("Schlatter") in view of an article by Baur in *J. Agric. Food Chem.*, 47, 753-761 (1999). Applicants respectfully traverse.

As discussed in Applicants' previous Amendment dated April 21, 2008, **Schlatter** discloses pesticidal aqueous suspension concentrates containing **(A)** water-insoluble solid triazole fungicides and **(B)** surfactants that are combinations of (1) tristyrylphenol ethoxylates (or a sulfate or phosphate thereof) with (2) one or more polymers that can be (a) vinylpyrrolidone homopolymers or (b) vinylpyrrolidone/styrene block copolymers or (c) hydrophilic ethylene oxide-propylene oxide block copolymers. E.g., page, paragraphs [0001] through [0005]. The Office Action at page 5 refers particularly to the disclosure of combinations of tristyrylphenol ethoxylates having an 8 to 40 mol ethoxylate content and ethylene oxide-propylene oxide block polymers having an average molecular weight of 1000 to 30,000 and an EO:PO weight ratio of at least 50%, a composition that may overlap with Applicants' component (c)(iii). Some of the components included in this general description do bear some resemblance to some of Applicants' components

(a) and (c). However, conspicuously absent from the general description are the narrowly defined alkanolethoxylates of Applicants' component (b), meaning inter alia that the critical elements of the aqueous suspension concentrates taught by Schlatter do not include all of the essential elements of Applicants' claimed invention. To fill this gap in the reference, the Final Office Action at page 5 relies on a summary discussion of optional additional agents beginning at paragraph [0038] of the reference and the disclosure of a few specific optional agents in the examples of the reference, with particular reliance on the inclusion of the specific dispersing agent Atlox 4913 in Example 2a (see paragraph [0059]) and a general reference to alcohol ethoxylate adjuvants at paragraph [0045]. [As mentioned below, the Final Office Action also refers to the disclosure of the inclusion of Atlox 4894 in the examples but only with respect to the previously submitted Declaration under 37 C.F.R. 1.132 of Dr. Peter Baur.]

Applicants respectfully maintain that these teachings of Schlatter are insufficient to lead those skilled in the art to their claimed invention.

First, Applicants again emphasize that the use of Atlox 4913 as a dispersing agent in a composition according to Schlatter would not lead those to their claimed invention. As correctly observed in the Office Action at pages 5-6, Atlox 4913 is indeed an acrylic graft copolymer of methyl 2-methyl-2-propenoate and α-(2-methyl-1-oxo-2-propenyl)-ω-methoxypoly(oxy-1,2-ethanediyl) (also see Schlatter at page 3, in table near top of right column, as well as a general reference to acrylic graft copolymers in paragraph [0039]). However, Applicants' specification at page 4, lines 17-22, clearly teaches that such compounds are among the dispersants of Applicants' component (c). Consequently, the disclosure of Atlox 4913 or any other such acrylic graft copolymers could at most suggest a dispersant within the meaning of Applicants' *component (c)* but *not* a penetration enhancer within the meaning of Applicants' *component (b)*. That is, even if Example 2a of the reference can be viewed as teaching the use of Atlox 4913 as a dispersant, this could not possibly suggest the use of the narrowly defined alkanolethoxylates specified for Applicants' *component (b)*.

Second, Applicants reiterate that Schlatter at page 3, paragraph [0045], mentions alcohol ethoxylates in very general terms as one of many types of optional adjuvants but does not provide any details whatsoever about their composition,

much less describe the narrowly defined alkanolethoxylates that are a key feature of the penetration enhancers of Applicants' component (b). Although the Final Office Action refers specifically to Atlox 4894 only as it relates to the sufficiency of the previously submitted Declaration of Dr. Peter Baur, Applicants again point out for the sake of completeness that Schlatter at page 3, near top of right column, identifies Atlox 4894 as a "Polyalkyleneglycol ether/alcohol EO." However, Schlatter gives no details about the formula of Atlox 4894 that would allow one to determine its relationship – if any relationship exists at all – to the narrowly defined alkanol-ethoxylates specified for Applicants' component (b). As will be discussed below in more detail with respect to the Baur article, Applicants submit that Dr. Baur's data, along with additional data presented in a new Declaration of Dr. Baur, are consistent with their belief that their claimed invention is patentably distinct from the cited references.

Applicants therefore submit that Schlatter alone would not lead those skilled in the art to their claimed invention. Applicants also submit that the Baur article would not "cure the deficiencies" of Schlatter as proposed in the Final Office Action.

The Baur article describes a model study on the effect of Genapol C-100 – an alkanolethoxylate within the scope of Applicants' component (b) – on the penetration of leaf cuticles by the model compound 3-O-α-D-glucose (also known more simply as "methylglucose"). Methylglucose is typically used as a marker to assess glucose transport (see, for example, *Online Medical Dictionary*, Centre for Cancer Education, University of Newcastle upon Tyne, Dec. 12, 1998; web address http://cancerweb.ncl.ac.uk/cgi-bin/omd?3-o-methylglucose (copy enclosed)), a purpose not shown in any cited document or known by Applicants to have any relationship to pesticide penetration. Furthermore, the Baur article itself indicates that "differences among species exist" (see page 760, right column middle of second paragraph of Conclusions), which suggests a degree of unpredictability that would need to be resolved through experimentation.

In contrast to the speculative connection between the teachings of a reference that provides no test data for pesticides, Applicants provided data in the previously submitted Declaration of Dr. Peter Baur – the same person who authored the article cited in the Final Office Action – showing the inferiority of a composition containing the azole compound tebuconazole and Atlox 4894 (a compound expressly disclosed in the primary reference) compared to a composition containing tebuconazole and

Genapol C-100, a compound within the meaning of Applicants' component (b). As can be inferred from the Final Office Action at page 10, the tested compositions did not include substances within the meaning of Applicants' component (c) (which Applicants' undersigned representative inadvertently failed to recognize or note in their previous Amendment) and thus provides only an indirect comparison. However, it is well established that even indirect comparisons, when "based on established scientific principles, can validly be applied to distinguish a claimed chemical process or product from that disclosed in the prior art." *In re Best, Bolton and Shaw*, 562 F.2d 1529, 195 U.S.P.Q. 430, 432 (C.C.P.A. 1977); see also *In re Blondel, Fouche, and Gueremy*, 499 F.2d 1311, 182 U.S.P.Q. 294 (C.C.P.A. 1974). Here, Dr. Baur's previous Declaration shows that compositions containing tebuconazole (as Folicur SC570) and Genapol C-100 provided clearly superior penetration of apple leaf cuticles by tebuconazole when compared not only with tebuconazole alone but also with combinations of tebuconazole and Atlox 4894.

Although not completely responding to the criticism of his previous Declaration, Dr. Baur now provides a second Declaration showing unexpected superiority of several compositions according to their invention containing tebuconazole and Genapol C-100 when compared to a composition within the general scope of Schlatter containing tebuconazole (as Folicur WG 25), Soprophor 4D384 (i.e., tristyrylphenol-16 EO sulfate ammonium identified in Schlatter as surfactant (1)), and Agrimer ST (i.e., a vinylpyrrolidone/styrene block polymer identified in Schlatter as surfactant (2b)). Even without the stabilizing effect obtained when all three of Applicants' specified components are present (cf. specification at page 14-22), compositions containing Genapol C-100 exhibited clearly enhanced penetration effects. [Dr. Baur's new Declaration also includes data for a comparison containing tebuconazole, Soprophor 4D384, and Pluronic PE10500, an EO-PO block copolymer that has an unknown structural relationship to the block EO-PO copolymer Pluronic P 105. Test results, however, are comparable to the other comparison compositions.] Since only two of the three of Applicants' specified components were used in these experiments, all inferences are clearly only indirect. However, Applicants' believe that similarly enhanced efficacy would be found for inventive compositions containing all of their specified components, the main advantage of the third component being enhanced stability. In the absence of any evidence to the contrary, Applicants believe that these indirectly comparative

experiments produced results consistent with patentable differences between their claimed invention and the references, particularly in view of the shortcomings of the teachings of the references discussed above.

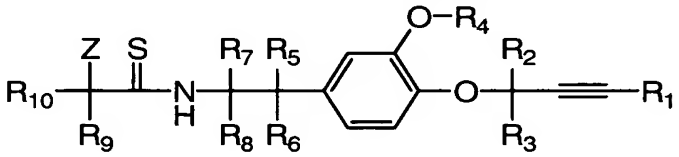
Applicants therefore respectfully submit that their claimed invention is not rendered obvious by Schlatter in view of the Baur article.

B. Schlatter in view of Baur and Kunz et al

Claim 16 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Schlatter in view of Baur and further in view of WO 02/081437 ("Kunz et al"). Applicants respectfully traverse.

As fully discussed above, Applicants submit that Schlatter and the Baur article do not alone or together suggest their claimed invention. Applicants also submit that Kunz et al would not lead those skilled in the art to their claimed invention.

As fully discussed in Applicants' previous Amendment, Kunz et al discloses microbicidal N-phenethyl thioacetic acid derivatives having the formula



in which $\mathbf{R_1}$ is hydrogen, alkyl, cycloalkyl, or optionally substituted aryl; $\mathbf{R_2}$ and $\mathbf{R_3}$ are each hydrogen or alkyl; $\mathbf{R_4}$ is alkyl, alkenyl, or alkynyl; $\mathbf{R_5}$, $\mathbf{R_6}$, $\mathbf{R_7}$, and $\mathbf{R_8}$ are each hydrogen or alkyl; $\mathbf{R_9}$ is hydrogen, optionally substituted alkyl, optionally substituted alkenyl, or optionally substituted alkynyl; $\mathbf{R_{10}}$ is optionally substituted aryl or optionally substituted heteroaryl; and **Z** is hydroxyl, optionally substituted aryloxy, optionally substituted alkoxy, optionally substituted alkenyloxy, optionally substituted alkynyloxy, optionally substituted arylthio, optionally substituted alkylthio, optionally substituted alkenylthio, optionally substituted alkynylthio, optionally substituted alkylsulfinyl, optionally substituted alkenylsulfinyl, optionally substituted alkynyl-sulfinyl, optionally substituted alkylsulfonyl, optionally substituted alkenylsulfonyl, optionally substituted alkynylsulfonyl, or a group -OCO-R_{11}, -OCO-OR_{11}, or -CO-CO-O-R_{11} in which R_{11} is hydrogen, optionally substituted alkyl, optionally substituted cycloalkyl, optionally substituted aryl, or optionally substituted heteroaryl. E.g., page 1. Such compounds are not among the types of active compounds specified by Applicants. Applicants also again point out that they have amended their base Claim 11 to replace the open bridging term "comprising" to the more restrictive

term "consisting essentially of." Therefore, while it is true that Kunz et al teaches that the disclosed N-phenethyl thioacetic acid derivatives can be used in combination with a host of mixing partners, including other fungicides (see bottom of page 23 through top of page 25), nothing in the reference would lead those skilled in the art to select only the particular components specified by Applicants while excluding the N-phenethyl thioacetic component required by the reference. Applicants therefore submit that Kunz et al would not lead those skilled in the art from to their claimed invention.

Applicants therefore respectfully submit that their claimed invention is not rendered obvious by Schlatter in view of Bauer and Kunz et al.

In view of the preceding amendments and remarks, allowance of the claims is respectfully requested.

Respectfully submitted,

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